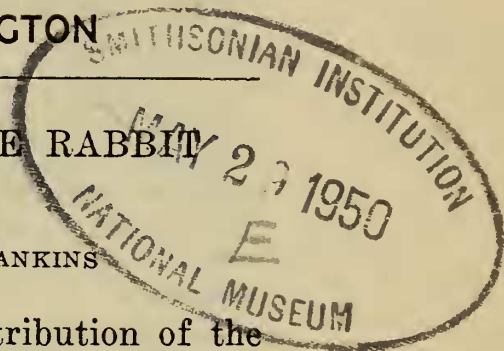


PROCEEDINGS  
OF THE  
BIOLOGICAL SOCIETY OF WASHINGTON

A NEW SUBSPECIES OF SNOWSHOE RABBIT  
FROM WYOMING

BY ROLLIN H. BAKER AND ROBERT M. HANKINS



In preparing a map of the geographic distribution of the snowshoe rabbit we were impressed with an unusual feature of the range currently assigned to the subspecies *Lepus americanus americanus* Erxleben. This unusual feature was the alleged presence of a population of this subspecies in the Bighorn Mountains of north-central Wyoming, far removed from other populations of *L. a. americanus* and geographically near the range of *Lepus americanus bairdii* Hayden. Reference to specimens in the University of Kansas Museum of Natural History revealed that snowshoe rabbits from the Bighorn Mountains did resemble *L. a. americanus* more than *L. a. bairdii* but disclosed also that there were some characteristics in which the animals from the Bighorn Mountains differed from both *L. a. bairdii* and *L. a. americanus*. Accordingly we appealed to those in charge of the U. S. Biological Surveys Collection for specimens to supplement our not wholly adequate material. With the combined material it was ascertained that the snowshoe rabbit of the Bighorn Mountains is an hitherto unrecognized subspecies which may be named and described as follows:

*Lepus americanus seclusus* new subspecies

*Type*.—Male, adult, skin and skull; no. 20897, Univ. Kansas Mus. Nat. Hist.; 12 mi. E and 2 mi. N Shell, 7900 ft., Bighorn Mts., Big Horn County, Wyoming; 8 July 1947; obtained by Gilbert Winemiller, original no. 22 of João Moojen.

*Range*.—Bighorn Mountains of north-central Wyoming.

*Diagnosis*.—Size medium (see measurements); top and sides of head Cinnamon Brown (capitalized color terms after Ridgway, Color Standards and Color Nomenclature, Washington, D. C., 1912); upper parts of body grayish; tympanic bullae moderately inflated; nasals, in anterior third, convex dorsally in longitudinal axis; interpterygoid space slightly wider anteriorly than posteriorly.

*Comparison*.—From *L. a. americanus* (specimens from Fort Chipewyan, Alberta, and Oscar, Ontario), *L. a. seclusus* differs as follows: Top and sides of head Cinnamon Brown instead of near (14) Brussels Brown; hair on basal half of anteromedial part of pinna of ear lighter-colored (short hair more buffy, and white marginal hairs longer giving

greater expanse of white); upper parts of body more grayish and less reddish; interpterygoid space broader anteriorly than posteriorly instead of parallel-sided; tympanic bullae larger. From *L. a. bairdii* (topotype and Albany Co., Wyo.), *L. a. seclusus* differs as follows: Top and sides of head Cinnamon Brown instead of near (a) Cinnamon Buff; hair on basal half of anteromedial part of pinna of ear darker (short hair darker buff, and white marginal hairs shorter giving smaller expanse of white); upper parts of body more grayish; nasals more convex in longitudinal axis; interpterygoid space less expanded anteriorly; tympanic bullae smaller.

*Remarks.*—*L. a. seclusus* appears to be restricted to the Bighorn Mountains. Nelson (N. Amer. Fauna, no. 9, p. 89, 1909) was correct in judging the rabbits from there to be more closely related to the subspecies *Lepus americanus americanus* than to the geographically adjacent *Lepus americanus bairdii*, which occurs in the several mountain ranges to the westward of the Bighorn Mountains. Immediately eastward of the Bighorns, there are no snowshoe rabbits; at least none has been reported from any of the higher areas where they might be expected to occur, as for example, the Black Hills. Although *L. a. seclusus* is distinguishable from either *L. a. americanus* or *L. A. bairdii* by each of five or more characters, *L. a. seclusus* is apparently structurally intermediate between *L. a. bairdii* and *L. a. americanus* rather than distinguished by any unique structural feature. For example, the width of the interpterygoid space, measured on a line between the last upper molars, averages 6.1 (5.5-6.5) mm. in *L. a. americanus*, 6.7 (6.3-7.2) in *L. a. seclusus*, and 7.2 (6.9-7.7) in *L. a. bairdii*.

*Measurements.*—Three adult males (first the type, and two others from 8400 ft. in the Bighorn Mountains, nos. 56005 and 56006, U.S.B.S.) measure as follows: Total length, 420, 450, 440; length of tail, 38, 47, 41; length of hind foot, 132, 136, 125; ear from notch (dry), 72, 73, 66; weight of the type, 1115 grams; basilar length of Hensel, 58.0, 59.5, 55.4; zygomatic breadth, 37.5, 38.8, 37.8; postorbital constriction, 12.0, 12.4, 11.8; length of nasals, 29.7, 31.2, —; alveolar length of maxillary tooth-row, 13.3, 14.3, 14.0.

*Specimens examined.*—Total number, 6, all from Wyoming, as follows: 12 mi. E and 2 mi. N Shell, 7500 and 5900 ft., Big Horn County, 2 (U.K.M.N.H.); Bighorn Mountains, 8400 ft., 4 (U.S.B.S.).

*Museum of Natural History, University of Kansas, Lawrence, Kansas. Transmitted March 22, 1949.*